An Archaeological Survey of the Fire Station No. 32 Project, North San Antonio, Bexar County, Texas

By

Harry J. Shafer and Thomas R. Hester

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URS Corporation
9901 IH-10 West, Suite 350
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Report No. 96
Abasolo Archaeological Consultants
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Abstract

Abasolo Archaeological Consultants conducted a Phase I archaeological survey of three acre Fire Station No. 32 tract bordering Charles Katz Drive in north San Antonio, Bexar County, Texas. Work included a pedestrian survey to detect and record any archaeological or historical component that may be present in the project area. The project area is on private property and no Texas Antiquities Permit is required. The surface of the property is littered with Uvalde gravels, and evidence of prehistoric quarry activity, designated as site 41BX1885, was recorded in the northwest portion of the property. The light surface lithic scatter extends beyond the property limits for an unknown distance. The archaeological indicators included tested cobbles, cores, and discarded flakes. The site had no archaeological significance other than noting its presence; no further archaeological work is recommended.

Introduction

Abasolo Archaeological Consultants (AAC) conducted a Phase I archaeological survey of the three-acre Fire Station No. 32 tract bordering Charles Katz Drive in north San Antonio, Bexar County, Texas (Fig. 1). Work included a 100% pedestrian survey. The work was carried out in accordance with the "Archeological Survey Standards for Texas." This Phase I investigation is designed to detect and record any archaeological or historical component that may be present in the project area. The project area is on private property and no Texas Antiquities Permit was required. The survey was carried out at the request of the City of San Antonio Office of Historic Preservation.

The pedestrian survey was done on May 13, 2011 by the authors. The property is currently undeveloped and has patchy dense growths huisache, mesquite, shrubs and small trees, with scattered prickly pear in the open areas (Fig. 3). The growth was mostly invader species typical of fallow farmland which this likely was in the last century. Visibility was spotty due to patches of heavy vegetation but sufficient to observe the surface exposures across the property. The terrain is relatively even and slopes northwestward toward a tributary of Zarzamora Creek.

Geology and Soils

. The survey area is situated, from a geological perspective, within deposits of the Navarro Group, dating to the late part of the Cretaceous period. Part of the "Gulf Series" (Arnow 1959), the Navarro is made up largely of clay and marl. The soil that caps the Navarro is the Houston Black Gravelly Clay (HuC). Found on 3-5 percent slopes, it is widespread in the Bexar County uplands (Taylor et al. 1991) and subject to water erosion. In the surface layer, about three feet thick, the soil is black includes gravels that make up 8 to 18 percent by volume. On narrow ridge tops, the gravels comprise up to 60% of the soil. Of interest to archaeologists doing surveys within this soil exposure is the abundance of gravels of siliceous nature, referred to as chert or "flint." For many

decades, these gravels have been labeled "the Uvalde Gravels," which has a very complex and poorly dated geologic origin. However, for thousands of years, the local Native Americans used the cherty gravels as resources for making their tools and points.

Archaeological Background

Regional Culture History

The following is a very brief outline of the culture history of northern Bexar County and adjacent areas. Major time periods and site types are noted here. Details on much of this section can be found in Turner and Hester (1999).

The Paleoindian period, 9,200-6,800 B.C., has distinctive chipped stone spear points used in hunting mammoth and other late Ice Age mammals early in the period. Other spear types appear with a shift to bison, deer and other game after the Ice Age ended around 8000 B.C. Known site types in northern Bexar County are campsites with flint-chipping debris from stone-tool making and repair. One site of Clovis age (9,200 B.C.), 41BX52, was excavated near FM1604 and Leon Creek A later site, dating around 7,500 B.C., was investigated on the grounds of St. Mary's Hall on Salado Creek.

Sites of the following Archaic period are common in northern Bexar County. These peoples were hunters and gatherers as in the earlier Paleoindian period, but lived in an environment very similar to those of modern times. Projectile points used to tip spears (often erroneously called "arrowheads") change in shape through time, from 6,800 B.C. to 500 A.D. Archaeologists use these forms to recognize more specific time frames within the Archaic (e.g., Early, Middle and Late Archaic). In northern Bexar County, the most distinctive Archaic site is the burned rock midden. These large accumulations of fire-cracked limestone result from the use of earth-oven cooking starting around 3,000 B.C. (Black et al. 1997). Such features were part of larger campsites, with large amounts of flint debris from tool-making; sometimes, animal bone (dietary remains) and charcoal

that can be used for radiocarbon dating. Other Archaic site types include lithic procurement areas or scatters of lithic debris (where flint cobbles eroded out of the Edwards limestone and were processed), hearth fields, lightly-used campsites probably representing short-term hunting and gathering activities, dense campsite deposits buried in stream terraces, and rarely, sinkhole burials.

By 700 A.D., there began to be some changes in the long hunter-gatherer life way. The Late Prehistoric is first seen with the introduction of the bow and arrow. The stone arrow points are very small (mistakenly called "bird points"), but could be used in hunting game of any size. By 1300 A.D., the economy emphasized buffalo-hunting. Most sites of this era include campsites, often in areas previously used by Archaic peoples, lithic scatters of this age; and the lithic procurement areas of earlier times continued to be used.

During the Historic period, the best known cultural resources are the archaeological remains of Spanish Colonial missions, settlements, and acequias. Also, urban residences, ranch and farm houses of cut stone, dating from the 1840s through the 1880s constitute an important component of the Historic cultural resources in Bexar County. Stacked-stone fences also occur. Such sites, including those without surviving structures, are recognized from 19th century pottery fragments, artifacts of glass and metal, etc. Later Historic houses and farmsteads, through the early 1900s, occur throughout the county.

Nearby Sites

The Medical Center complex has seen rapid development in the past 30 years. In most cases, no archaeological survey was done before construction took place. Thus, there are few known or documented sites within the area. Indeed only two sites are known within a radius of about two miles from the Firestone 32 project area.

Site 41BX1791 is located near the corner of Babcock and Medical Drives, and in close proximity to Zarzamora Creek. Recorded in 2008, the site is characterized as a "lithic scatter," with some fire-cracked rocks, and a mix of Historic 19th and 20th century

artifacts (horseshoe, washer, some pieces of concrete). This locality is about .75 miles from the Fire Station 32 tract.

Located approximately a mile southwest of the Fire Station 32 survey area is site 41BX487, recorded in 1978. It is also in the Zarzamora Creek drainage, near Wurzbach and Gary Cooper Streets. The site is described as a "midden, with burned rock" with several unfinished bifaces, a possible Kinney point (Middle Archaic) and, again, some mixed Historic artifacts (buttons, knives, bottles). The survey was done after the site was exposed by bulldozing, and is assumed to have been fully destroyed a number of years ago.

Research Design

The research designed called for a pedestrian survey of the property and to record a possibly archaeological site. The following scope of work was proposed for this project.

Scope of Work

Task A: Conduct a 100% surface inspection of the approximately three acres for traces of prehistoric or historic archaeological resources; shovel tests were to be excavated if deemed necessary to determine the presence or absence of buried cultural material. The need for shovel tests was based on surface visibility, soil conditions, and geomorphic setting.

Task B: Document any archaeological sites and isolated finds encountered in the survey by obtaining GPS coordinates on the location and plotting the resources on a project map.

Task C: Provide interpretations of the survey findings and assess the significance of any archaeological sites encountered within the project area with regards to their potential for nomination to the National Register of Historic Places and as a Texas Archeological

Landmark.

Task D: Prepared a written report or a letter report, based on the results, detailing the area surveyed, methods used, archaeological background, historical background, survey findings, and recommendations for future work. A digital copy of the report has been provided to the URS Corporation.

Survey Results

Task A called for the pedestrian survey of the property; shovel testing was not necessary due to the nature of the cultural deposits and geological conditions. The ground throughout the three acres was littered with Uvalde gravels consisting mostly of weathered chert, and an occasional nodule of chalcedony (Figs 4 and 5). The weathering consists of thermal pitting (frost fracturing) and surface patination (Fig. 5). We noted that the chert was mostly pebble size in higher, southern portion of the property but achieved cobble size in the lower northern and northwest portions. Down slope movement of the larger cobbles from erosion may account for this differential size distribution. The survey team did observe a light surface scatter of tested cobbles, cores, and hammerstone struck flakes in the northern lower section of the property closest to utility easement (Figs. 6 and 7). This lithic scatter extends beyond the property limits for an unknown distance to the west and seems to increase in density in that direction (Fig. 8). No stone tools were observed other than a possible hammerstone. The density of material was about one artifact per three square meters or less, but because of the increase density toward the northwest portion the property, we felt there was justification for archaeological site designation. The site has been designated as 41BX1885. Figure 8 shows the approximate extent of 41BX1885 on the Fire Station 32 tract, and the direction it continues off the property. The archaeological site is described as a "lithic procurement site" where prehistoric groups tested and exploited the chert nodules exposed on the surface.

No evidence of campsite activities, such as fire-cracked limestone rocks or secondary or tertiary flaking debris was observed. Fire-cracked limestone and secondary and tertiary flaking debris would be indicative of prolonged camping where food preparation and chipped stone artifact manufacture involving thinning and finishing blanks into tools would have taken place.

Lithic procurement sites such as this one are very common in the prairies bordering the Balcones Canyonlands where extensive high-quality chert nodules are exposed in Uvalde Gravels on the surface, and were tested and exploited for large flakes or blanks for the production of stone tools over a 11,500 year period (Shafer 2005; Shafer and Hester 2004, 2006a, 2006b). Rarely are time diagnostic artifacts such as projectile point styles or other tool types present among these kinds of lithic deposits to indicate when such exploitation occurred. The authors have observed that some of these surface gravels may extend for miles along the slopes of creeks draining into the Leon Creek-Medina River, or Salado Creek tributaries of Martinez Creek, and typically show limited evidence of prehistoric resource procurement and quarrying.

Summary and Conclusions

A pedestrian survey of the three-acre property designated for the future sites of Fire Station No. 32 found evidence of a light surface scatter of chipped stone debris (tested cobbles, core, and flakes) indicative of quarry activity sometime or times in the prehistoric past. The area was designated as archaeological site 41BX1885. The surface scatter has no intrinsic archaeological significance other than recording its presence. **No further archaeological work is recommended.**

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Figures

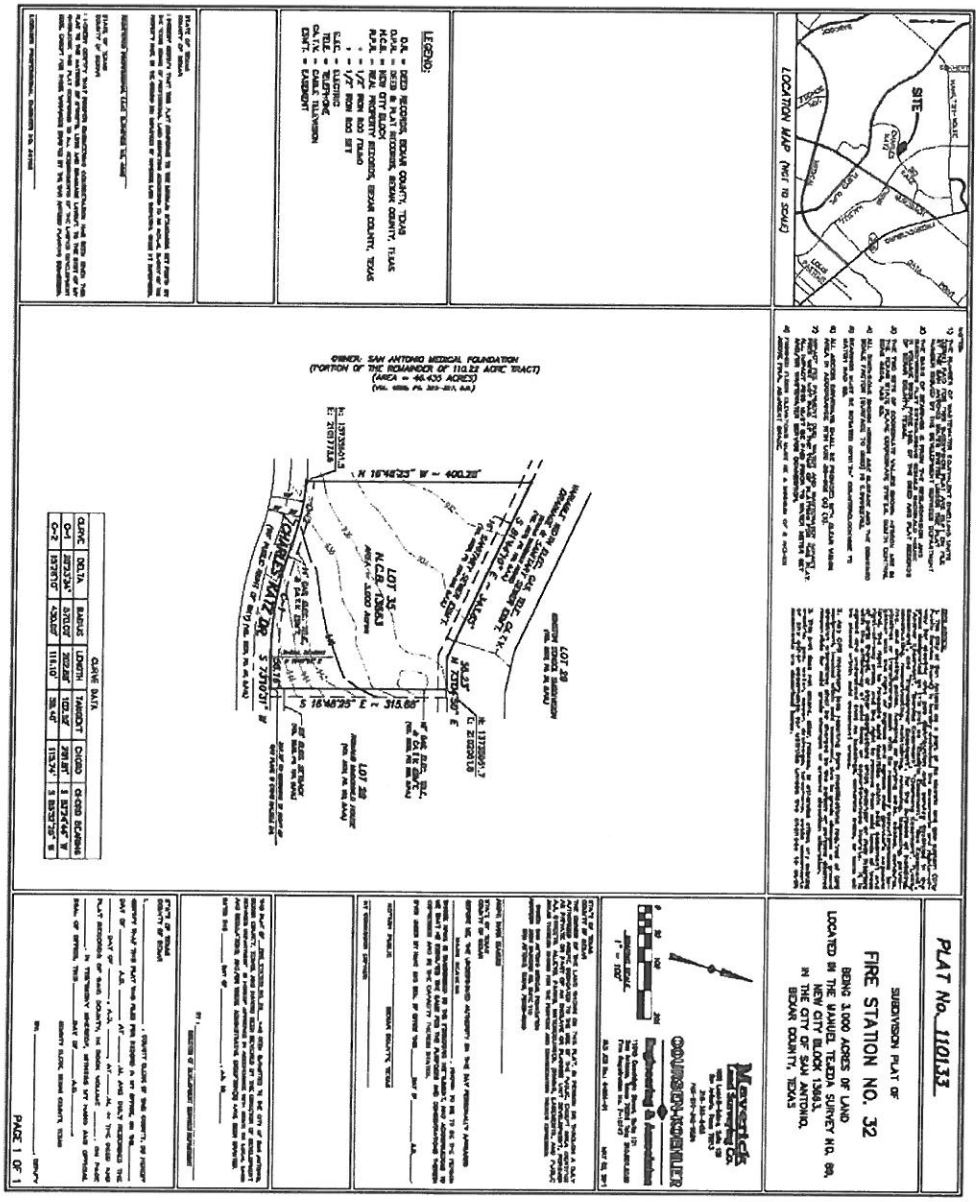

Figure 1. Plat map for Fire Station 32.

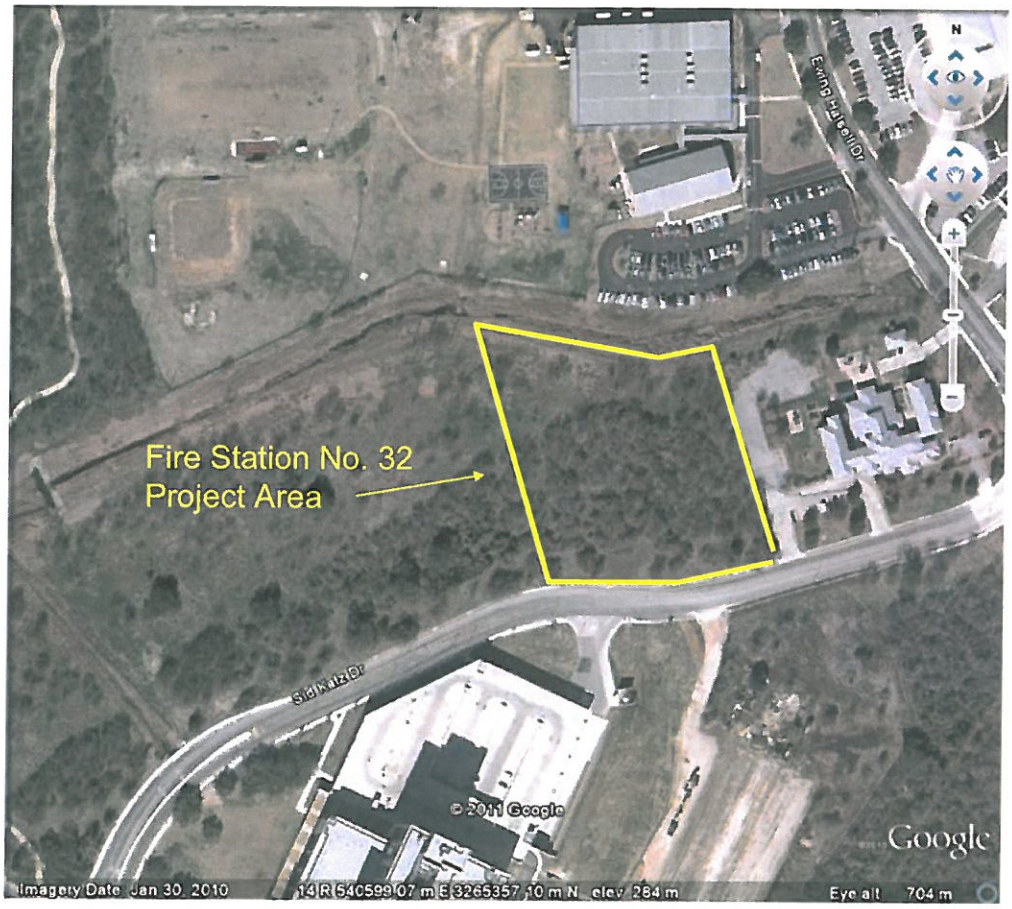

Figure 2. Google Earth image showing the location of the three-acre Fire Station 32 tract.

Figure 3. Two views of the Fire Station 32 tract showing patches of open ground and patches of dense brush.

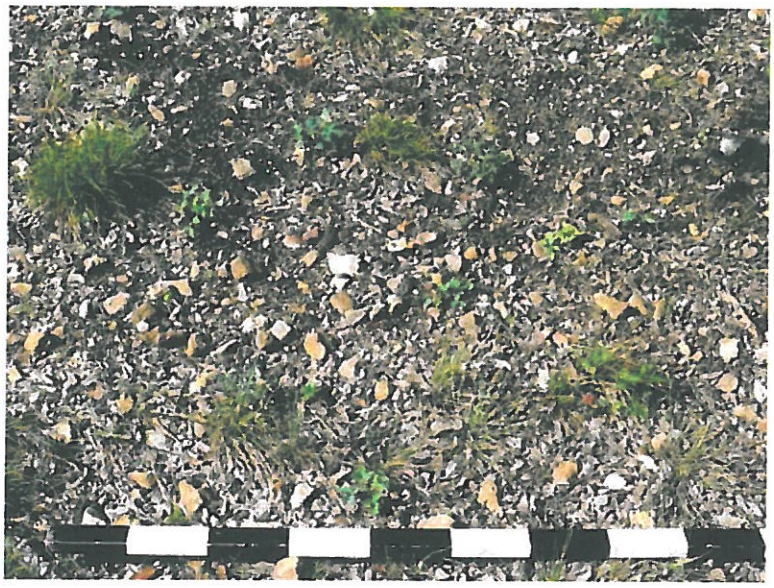

Figure 4. Example of the cherty Uvalde Gravels that litter the surface of the Fire Station 32 tract.

Figure 5. Examples of naturally weather chert from Uvalde Gravels at the Fire Station 32 tract.

Figure 6. Examples of tested cobbles showing the removal of flakes by hard-hammer percussion.

Figure 7. Examples of primary flakes and a core (right) struck by hard-hammer percussion.

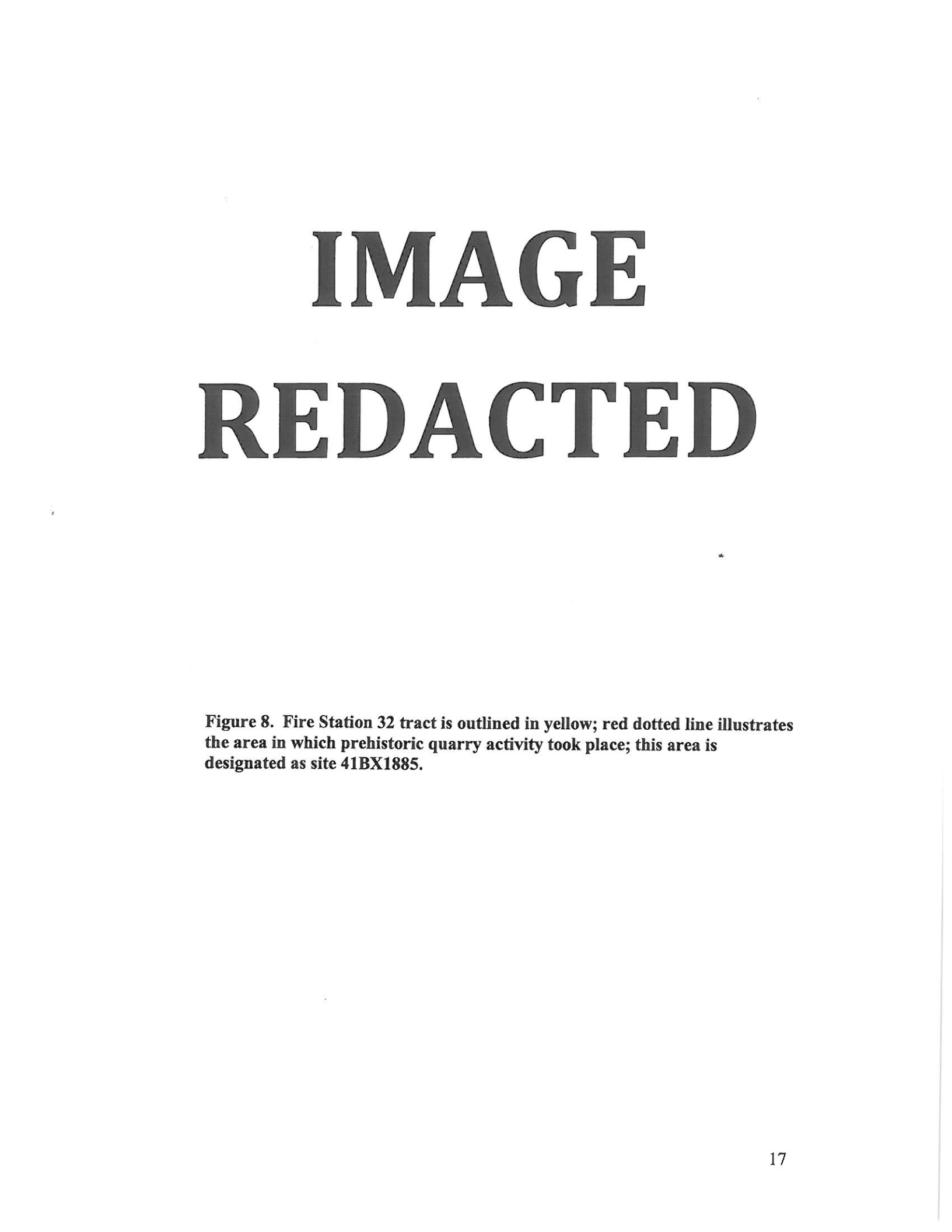

Figure 8. Fire Station 32 tract is outlined in yellow; red dotted line illustrates the area in which prehistoric quarry activity took place; this area is designated as site 41BX1885.